Appendix I

1. (previously amended) Software, recorded on a computer-readable medium, for enabling a user to utilize a plurality of knowledge acquisition approaches to find a solution to a task using a task-method-knowledge approach and a structure-behavior-function approach, the software performing the steps of:

acquiring a task by receiving information specifying at least one input parameter, one output parameter, and an initial approach;

analyzing the provided information using the task-method-knowledge approach and the structure-behavior-function approach based on the specified initial approach;

processing the task using the determined approach to achieve a solution, the processing utilizing the input parameter;

the processing further comprising using a structure-behavior-function behavior and encoding the behavior using a task-method-knowledge hierarchy which is collected from the user;

the processing further comprising using a task-method-knowledge hierarchy and encoding the input parameter and the output parameter using a structure-behavior-function model which is collected from the user.

2. (previously amended) The software of claim 1 further including, if the determined approach is the task-method-knowledge approach:

searching a plurality of existing methods for a method operable to provide at least a portion of the solution;

selection, by user input, the method if the method exists; and acquiring a user-defined method, encoded using a task-method-knowledge hierarchy, if the method does not exist.

3. (canceled) The software of claim 2 further including:

searching a plurality of existing procedures for a procedure rather than searching for a method, the procedure operable to provide at least a portion of the solution;

selecting the procedure if the procedure exists; and acquiring a user-defined procedure if the procedure does not exist.

4. (previously amended) The software of claim 2 further including, if the determined approach is the structure-behavior-function approach:

searching a plurality of existing models for a model operable to provide at least a portion of the solution;

selection the model if the model exists;

acquiring a user-defined model if the model does not exist;

searching a plurality of existing behaviors for a behavior applicable to the model;

selecting the behavior if the behavior exists, the selection associating the behavior with the model; and

encoding the behavior into the model using the task-method-knowledge approach if the behavior does not exist.

5. (previously amended) The software of claim 4 wherein acquiring a user-defined model further includes:

searching a plurality of existing components and existing connections for a first component, a second component, and a connection between the first and second components operable to represent the model; and

if at least one of the first component, the second component, or the connection does not exist, defining the first component, the second component, or the connection which does not exist.

6. (previously amended) The software of claim 4 further including mapping either the input parameter of or the output parameter to at least a portion of the first model, the mapping operable to assign the mapped parameter to the portion.

7. (previously amended) The software of claim 4 further including defining an event, the event operable to identify when to use the method.

8. (previously amended) The software of claim 4 further including determining the existence of at least one other method.

9. (currently amended) The software of claim 92 further including providing a processing order, the processing order operable to define the order in which the method will be processed relative to a plurality of other methods awaiting processing.

10. (previously amended) The software of claim 1 further including:

determining whether the user desired to modify at least one of the input or output parameters; and modifying at least one of the input or output parameters if the user so desires.

11. (previously amended) A computer-readable medium for storing a computer executable software program for determining a solution to a task using a plurality of knowledge acquisition approaches, the program including instructions for:

defining the task as an input parameter, collected from a user, encoded using a first structure-behavior-function model;

defining the solution as an output parameter, collected from the user, encoded using a second structure-behavior-function model;

selecting a knowledge acquisition approach from a group consisting of a task-method-knowledge approach or a structure-behavior-function approach processing the task using the selected approach;

determining whether the task includes at least one portion to be processed using the non-selected approach;

the determining of the solution of the task further comprising using a structure-behavior-function behavior and encoding the behavior using task-method-knowledge hierarchy which is collected from a the user.

12. (previously amended) The medium of claim 11 wherein the program further includes instructions for storing the output parameter generated by processing the portion; and using the output parameter as an input to the task.

13. (original) The medium of claim 11 wherein the program further includes instructions for redefining the task if the solution is not found.

14. (original) The medium of claim 11 wherein the program further includes instructions to provide at least one interface enabling interaction with the program.

15. (original) The medium of claim 11 wherein the program further includes instructions for redefining the solution if the solution is not found.

16. (previously amended) A computer system for providing a solution to a task through information processing, the system including:

a processor;

a memory accessible to the processor; and software, a portion of which is stored in the memory, the software including instructions for:

accepting at least a first parameter, encoded as a first structure-behavior-function model, to define the task;

accepting at least a second parameter, encoded as a second structure-behavior-function model, to define the solution;

accepting an initial approach for processing the task;

determining whether to use a task-method-knowledge approach or a structure-behavior-function approach for processing the task, the determination based on the specified initial approach;

processing the task using the determined approach based on the first parameter

the processing of the task further comprising using a structure-behavior-function behavior and encoding the behavior using a task-method-knowledge hierarchy which is collected from a user, and

determining whether the solution is found based on the second parameter.

17. (original) The system of claim 16 wherein the software further includes instructions for, if the determined approach is the task-method-knowledge approach:

determining whether a first portion of the task should be processed independently;

determining whether to use the task-method-knowledge approach or the structure-behavior-function approach for processing the first portion if the first portion of the task should be processed independently; and

processing the first portion using the determined approach.

18. (original) The system of claim 17 wherein the software further includes instructions for, if the determined approach is the structure-behavior-function approach:

determining whether a second portion of the task should be processed independently using the task-method-knowledge approach; and

processing the second portion using the task-method-knowledge approach if the second portion should be processed independently.

19. (original) The system of claim 16 wherein the software further includes instructions for modifying the first parameter if the solution is not found.

20. (original) The system of claim 16 wherein the software further includes instructions for modifying the second parameter if the solution is not found.